Engaging audiences on social media: Identifying relationships between message factors and user engagement on the American Cancer Society's Facebook page☆

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ABSTRACT

In this study, a content analysis was conducted with posts from American Cancer Society's (ACS) Facebook page to explore the relationship between message relevance, source characteristics, and message features with the number of likes, comments, and shares received by them. Limited Capacity Model for Motivated Mediated Message Processing (LC4MP) was used as the theoretical foundation for the study. Findings showed that cancer-related posts received more likes, comments and shares than posts that were not related to cancer. Also, posts by the American Cancer Society received more likes, comments, and shares than other source categories. Findings also indicated that though message features were related to likes, comments, and shares, the nature of relationship and the role of different features varied with each measure. Overall, findings highlight the role of motivational activation through message factors in eliciting user response in social media environments.

1. Introduction

Cancer is one of the leading causes of death worldwide, and according to statistics compiled by the World Health Organization (2017), around 14 million new cases are diagnosed each year worldwide, and around 8.8 million people die from various forms of cancer annually. Beyond the effects on patients, cancer also impacts family members, friends, colleagues, etc., many of whom use digital communication technologies to seek social support and information to help better understand the disease, its effects, and how to cope. These technologies include smartphone apps (Pandey et al., 2013), internet search engines (De Choudhury et al., 2014), and social media platforms such as Facebook (Nabi et al., 2013). The versatile nature of the internet carries great promise for platforms for information dissemination, promotion, and communication that are accessible, cost-effective, and efficient.

Social media in particular has become an important part of a growing number of individuals' daily lives (Boyd and Ellison, 2007). Applying the Uses and Gratifications perspective, Baek et al. (2011) found motivations for using Facebook include information-sharing, convenient communication and entertainment, passing time, communicating with people with similar interests and backgrounds, indicating wants and needs to others, and promoting organizations and people. Research has shown people affected by cancer utilize social media in order to satisfy differing goals in context of the disease (Cavallo et al., 2014; Bender et al., 2011). In the context of health communication environments, this implies the potential of platforms such as Facebook to create digital spaces that may bring together various stakeholders such as organizations, experts, governments, and patients. Many individual users utilize

social media such as Facebook for interpersonal communication for health-related purposes (Moorhead et al., 2013; Grajales et al., 2014). Beyond interpersonal communication, various stakeholders including healthcare professionals, charitable and nonprofit organizations, patients, and general information-seekers, use social media for disclosure, information dissemination, and for generating involvement with organizations or causes (Waters et al., 2009). Analyzing social media users in health contexts, McLaughlin et al. (2012) found social networks fulfilled the needs of cancer survivors not being met in offline environments. Similarly, Chou et al. (2009) found younger individuals with poor subjective health and cancer experience were associated with people's use of social media for social support. However, many studies examining social media and health communication have encountered various issues such as sample size, sample quality, and methodological reliability (Moorhead et al., 2013), raising concerns and highlighting the need for more research in the area.This study examines how individuals respond to different types of messages posted to the American Cancer Society's (ACS) Facebook page. The ACS was selected for this study for a variety of reasons, including its prominence as an organization that focuses on medical aspects including cancer prevention and management, information dissemination, public education, and social support. Founded in 1913, ACS is one of the oldest organizations of its kind, (American Cancer Society, 2017; Eyre and Blount, 2006), and is one of the largest cancer-specific organizations in the world. Additionally, ACS has been active in various forms of social media since 2004 (Santicola, 2009), including unique platforms such as *Second Life*, a virtual world comprised of equal parts video game and online chatroom (Butcher, 2009).

In this study, authors propose Limited Capacity Model for Motivated Mediated Message Processing (LC4MP) as the theoretical foundation for the study and conduct a content analysis to test the relationships between source factors, message factors, message features, and user engagement on the ACS' Facebook page.

2. Literature review

2.1. Social media and user engagement: Methodological innovation and explication

Social media such as Facebook provide researchers a distinctive opportunity to unobtrusively observe user response to messages, in real-time environments, over a period of time. It allows users to send and receive messages and message feedback in the form of likes, comments, and shares (Facebook, 2017).

Facebook defines a *like* as the easiest way to indicate a user enjoys a post, whereas a *share* redistributes and publishes a post on a user's and their connections' pages, and a *comment* allows a user to create or add content to another user's posts (Facebook, 2017). Researchers argue that there may be several motivations for liking, sharing, or commenting on social media posts, including social connection and identity sharing (Joinson, 2008), social benefit and online community maintenance (Kite et al., 2016), and are influenced by attitudes, social, and subjective norms (Chin et al., 2015; Kim et al., 2015a,b). Others argue social media does not motivate, but may elicit pre-existing motivations in terms of user engagement levels (Vaccari, 2010, 2013).

Kim and Yang (2017) point out that each engagement behavior differs in value and commitment of resources. Research is consistent, however, as to the value hierarchy each behavior represents, with *like* representing the simplest and least resource-consuming behavior, followed by *comment*, which requires a user to generate content in response to a post, and *share*, which requires a user to generate content and take ownership of the post by publishing it to their own Facebook page (Kim and Yang, 2017; Kemp, 2016; Calero, 2013).

A *like* indicates an acknowledgment of a post and does not indicate how a user actually feels about that post. Users that only *like* a post or page are neither contributing to the conversation or creating/perpetuating nor publishing content to their own pages (Kim and Yang, 2017). *Liking* is positively influenced by a variety of motivations: Chin et al. (2015) found hedonic, utilitarian, compliance, conformity, and affiliation motivations all influence attitudes toward *liking* a post, and subjective norms influence the behavioral intent to *like* posts, which in turn influence actual behaviors.

Comment-level engagement is more akin to interpersonal communication and requires allocation and consumption of more cognitive resources than liking (John et al., 2017; Kim and Yang, 2017), in that a user must generate a thought – ranging from simple to complex – click the *comment* or *reply* buttons, type out that thought, consider it, then click another button to publish (John et al., 2017; Kim and Yang, 2017; Facebook, 2017). Comments have a higher digital value than likes to individual users as well as businesses and nonprofits, indicating a user has at least partially engaged with a post's content enough to formulate a response (John et al., 2017; Kim and Yang, 2017). Social media researchers point out comment-level engagement behaviors are forms of interpersonal communication (Ballantine et al., 2015; Smock et al., 2011), which may sometimes, due to the public nature of Facebook comments, be identified as *masspersonal communication* (Ballantine et al., 2015; Carr et al., 2008; O'Sullivan and Carr, 2017). As Ballantine et al. (2015) point out, while comments are posted in what is essentially a public forum for all to see, they are frequently posted with personal, interpersonal, or relational motivations and intent. Beyond interpersonal communication, comments also carry the potential to affect an audience's perception of a user, a post, or associated media content (Waddell and Sundar, 2017), and may influence a user's online communication and information-seeking behavior (Kim et al., 2016), particularly regarding health communication (Kim et al., 2015a,b), such as seeking information on potential causes, symptoms, and onsets of disease, and behavior modification for disease prevention.

Sharing-level engagement is the highest level of the three in this study and can be seen as a promotion-oriented behavior. Kim and Yang (2017) found share-level behavior may be either affective or cognitive, or a combination of the two, and may also be a user strategy for self-presentation, as shared content not only appears in other users' Facebook feeds but is published to the sharers' feeds. Share-level behaviors also allow users to introduce or comment on shared items, which requires more cognitive effort than liking or commenting alone. Herrero et al. (2017) found three primary drivers of intent to engage in share-level behaviors – performance